

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
4 October 2001 (04.10.2001)

PCT

(10) International Publication Number
WO 01/73081 A1

(51) International Patent Classification⁷: **C12N 15/70**

(21) International Application Number: PCT/KR01/00549

(22) International Filing Date: 31 March 2001 (31.03.2001)

(25) Filing Language: Korean

(26) Publication Language: English

(30) Priority Data:
2000/17052 31 March 2000 (31.03.2000) KR

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(81) Designated States (national): CN, US.

(84) Designated States (regional): European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR).

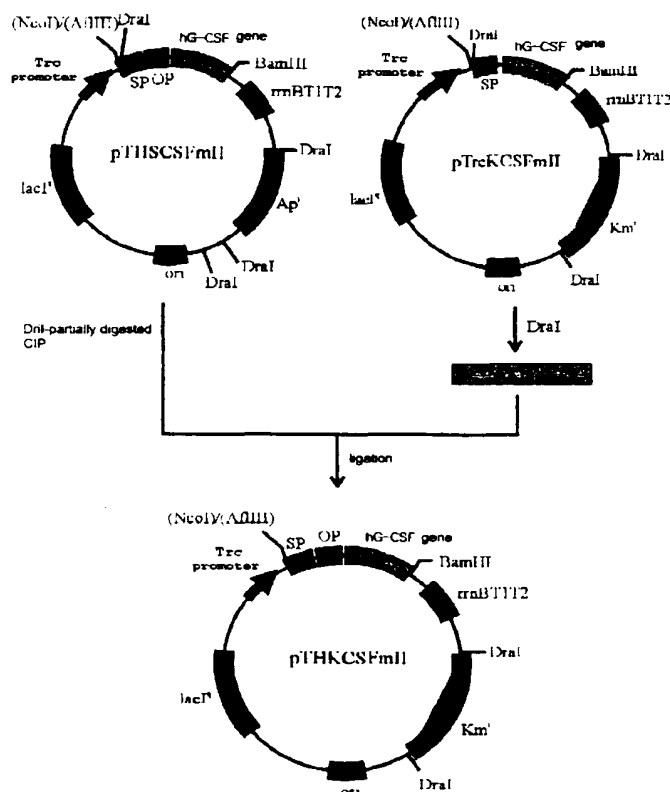
Published:

with international search report

before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

[Continued on next page]

(54) Title: **ESCHERICHIA COLI STRAIN SECRETING HUMAN GRANULOCYTE COLONY STIMULATING FACTOR (G-CSF)**



(57) Abstract: The present invention provides a recombinant plasmid vector comprising a kanamycin resistance gene, a promoter, an endoxylanase signal sequence, a nucleotide sequence coding for an oligopeptide consisting of 13 amino acids including 6 consecutive histidine residues, and a human granulocyte colony stimulating factor (hG-CSF) gene; an *E. coli* transformed with the said vector; and, a process for producing complete hG-CSF protein with high purity from the protein pool secreted by the said microorganism. In accordance with the invention, the hG-CSF protein can be prepared with high purity through rather simple process facilitating secretion of large amount of hG-CSF fusion protein into the periplasm, which does not require complicated processes such as solubilization and subsequent refolding required for isolation of the hG-CSF protein produced in cytoplasm as insoluble inclusion bodies by conventional techniques, thus, the hG-CSF protein can be widely used as an active ingredient in the development of supplementary agents for anticancer therapy.

WO 01/73081 A1